

1 **Amendments to the Claims - All Claims are set forth in accordance**
2 **with the new Response Format.**

3 **Claims 1-29 were cancelled in previous papers.**

4 **Claim 30-42 are pending**

5 **Please cancel claims 30-32.**

6 **Claims 33 and 36 are amended.**

7 30. (Cancelled)

8 31. (Cancelled)

9 32. (Cancelled)

10

11 33. (Currently amended) ~~A waste liquid treatment system of claim 32 further~~
12 ~~comprising: A waste liquid treatment system comprising the following:~~

13 A. a media matrix (1) comprised of at least one inner core (70) received into at
14 least one tube (20);

15 B. the media matrix (1) received into a media matrix container (250) having
16 wastewater inlet (350) and discharge means (400);

17 C. the media matrix (1) is comprised of a plurality of tubes (20) each sized to
18 receive at least one elongated inner core (70);

19 D. the at least one inner core (70) has a top (75), a bottom (80) and a length (85);

20 E. the tube (20) having a tube top (25), tube bottom (30) and tube length (35) and
21 a tube axis (37); the tube axis (37) centrally positioned from the tube top (25) to the tube
22 bottom (30) and extending throughout the tube length (35) of each tube (20);

23 F. the inner core (70) having at least one vane (90);

24 G. the at least one vane (90) extending from a central core element (95) where the
25 central core element (95) coincides with the tube axis (25).

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28 filing, Application No. 09/041,685 on
September 7, 2004 by Floyd E. Ivey in response
to Office Action of June 4, 2004

1 H. the inner core (70) having a plurality of vanes (90); the central core element
2 (95) of at least one inner core (70) parallel with the central core element (95) of other at
3 least one inner core (70);

4 I. the tube length (35) generally less than the inner core length (85).

5 J[A]. the tube (20) having an inner wall (140) where at least one groove (150) is
6 formed in the inner wall (140); said at least one groove (150) sized to receive at least one
7 vane (90);

8 K [B]. the at least one groove (150) receives and restrains at least one vane (90)
9 of comprising vane (90) restraining means securing the at least one inner core (70) in a
10 fixed position within said tube (20);

11 L₂ [C]. the tube (20) having an outer wall (190) having at least one fin (200)
12 extending outwardly therefrom.

14 34. (Original). A waste liquid treatment system of claim 33 further comprising:

15 A. the tube (20) receiving at least one inner core (70) may be positioned at any
16 location along the inner core length (85);

17 B. the at least one inner core (70) having at least eight vanes (90).

19 35. (Original) A waste liquid treatment system of claim 34 further comprising:

20 A. of the at least one vane (70) received into the at least one depression or at least
21 one groove (150) at a vane tip (98).

22 B. groove walls (155) extending from the inner wall (140) forming the at least
23 one depression or at least one groove (150); said at least one groove (150) comprising a
24 vane tip (98) restraining means.

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September 7, 2004 by Lloyd E. Ivey in response
to Office Action of June 2, 2004.

1 36. (Original) A waste liquid treatment system of claim 35 further comprising:
2 A. vane (90) restraining means by a friction fit between the vane tip (98) and
3 groove walls (155) when received into the groove (150) or by application of an adhesive
4 or a mechanical fixing means between the vane tip (98) and the groove walls (155);
5 B. at least two depressions or at least two grooves (150) are formed in the inner
6 wall (140) with each of said grooves (150) receiving at least one vane (90).

7
8 37. (Original) A waste liquid treatment system of claim 36 further comprising:
9 A. the at least one vane (90) having a vane surface (92);
10 B. the at least one vane (90) extending from the central core element (25) along
11 the length of said central core element (25); the surface (92) covered with a biofilm (97);
12 C. the at least eight vanes (90) are spaced equidistant from the adjoining vane
13 (90) and extend from the central core element (25).

14
15 38. (Original) A waste liquid treatment system of claim 37 further comprising:
16 A. at least four fins (200) extending from said outer wall (190);
17 B. the fin (200) is generally elongated having a fin surface (210);
18 C. the plurality of tubes (20) contact adjacent tubes (20) at the respective tube
19 outer walls (190) at least one contact point (195) where affixing means fix adjacent tubes
20 together and hence to fix the position of the plurality of tubes (20) within the media
21 matrix (1).

22
23 39. (Original) A waste liquid treatment system of claim 37 further comprising:
24 A. contact point (195) affixing means including adhesives, mechanical fasteners
25 and other methods or devices;

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28 filing, Application No. 09/041,685 on
September 1, 2004 by Floyd E. Ivey in response
to Office Action of June 24, 2004

